DOCUMENT RESUME

ED 367 304 IR 016 577

AUTHOR Norman, Douglas
TITLE Interactive Radio as a Component of Distance Education in Third World Countries.
PUB DATE Oct 93
NOTE 10p.; Paper presented at the National Third World Studies Conference (Omaha, NE, October 1993).
PUB TYPE Reports - Descriptive (141) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Developing Nations; *Distance Education; Educational Change; *Educational Radio; Elementary Secondary Education; Foreign Countries; Higher Education; Language Arts; Mathematics Instruction; Problems; Science Instruction; Teacher Education
IDENTIFIERS Agency for International Development; *Interactive Radio; *Third World

ABSTRACT

Interactive radio is a technique to promote active listening to educational radio programs targeted at students and teachers in Third World countries. The U.S. Agency for International Development (USAID) has supported interactive radio in Africa, Asia, and Latin American to provide supplementary training to students with poorly prepared teachers. An example was a language arts program in Kenya, where evaluators concluded that radio students were consistent in their statistically significant superiority over control students in listening, speaking, reading, and writing. Despite these findings, other studies concluded that interactive radio is better for teaching math, which has a limited number of correct answers, than language. USAID also has funded interactive radio projects in science, mathematics, teacher training, and high-school equivalency. Some critics of interactive radio say it is too dependent on expensive hardware and that Third World students are not well enough motivated, cannot read well enough, and cannot work well enough on their own for distance education to significantly affect educational progress in developing nations. (Contains 9 references.) (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

IR

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

ED 367 304

Interactive Radio As A Component of Distance Education In Third World Countries[1]

By Dr. Douglas Norman,
Associate Professor,
Pembroke State University

A Paper Presented At The
National Third World Studies Conference

Omaha, Nebraska
October, 1993

[1] This paper was developed with the assistance of a Faculty Research Grant from Pembroke State University. The author wishes to express his appreciation to the Clearinghouse for Development Communication, Arlington, Virginia, for its help in providing material for this paper.

IR016577

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
C. Douglas Norman

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC).

Abstract

Interactive Radio as a Component of Distance Education
In Third World Countries

A Paper Presented at the National Third World Studies Conference, Omaha, Nebraska, October, 1993

Interactive radio is a technique to promote active listening to educational radio programs targeted at students and teachers in Third World countries. The U. S. Agency for International Development (USAID) has supported interactive radio in Africa, Asia and Latin America to provide supplementary training to students with poorly prepared teachers. A notable example was a language arts program in Kenya, where evaluators concluded that "radio students were remarkably consistent in their statistically significant superiority over control students in . . . listening, speaking, reading and writing. Despite these findings, other studies concluded that interactive radio is better for teaching math, which has a limited number of correct answers, than language. USAID also has funded interactice radio projects in science, mathematics, teacher training and high-school equivalency. Some critics of interactive radio say it is too dependent on expensive hardware and that Third World students are not well enough motivated, cannot read well enough, and cannot work well enough on their own for distance education to significantly affect educational progress in Developing Nations.

Interactive Radio as a Component of Distance Education in Third World Countries

By Dr. Douglas Norman
Pembroke State University

Interactive radio is a technique to promote active listening to educational radio programs targeted at students and teachers in Third World countries. Programs with pauses for listener responses have been used in a number of Third World nations. Two of them are Kenya, where interactive radio was used in teaching language arts to elementary school pupils, and Nepal, where it was used to provide inservice training to teachers. In both countries, radio was seen as a way to overcome problems caused by poorly trained teachers, bad roads, difficult terrain and lack of mass transportation.

Distance education projects using radio were funded by the U. S. Agency for International Development in a number of other Third World nations.

Evaluation of the Kenya project found that "radio students were remarkably consistent in their statistically significant superiority over control students in terms of . . . listening, speaking, reading, and writing."[1]

Broadcasts in Nepal reached almost 6,000 teachers in the first phase of a teacher-training project. Evaluation was in terms of project input, not improved performance by the target audience: "An evaluation toward the end of the first phase of the project showed that the target group of untrained, rural primary teachers had been successfully reached."[2]

Advantages of interactive radio in Third World countries were summarized by Moulton: "Interactive Radio Instruction has gained worldwide attention as a low-cost means of helping children learn in schools with poorly trained teachers and few additional resources."[3]

"Interactive," as used in interactive radio, is different from interactive computer programs or interactive distance education by satellite where learners can have a dialogue with radio teachers. The Clearinghouse for Development Communication identified five types of interactive radio instruction in Developing Nations.

1. Students respond to radio questions posed as often as every 20 to 30 seconds. This is similar to classroom drill and is helpful in teaching mathematics and language arts.[4]

2. Students listen for specific information presented in story or dramatic form.[5]

3. Students listen to radio to find answers to printed questions.[6]

4. Listeners are invited to send answers to broadcast questions in letters to weekly or monthly radio programs or printed newsletters.[7] This is especially useful for teacher training.

5. Listeners are invited to respond by letter or telephone, where available, to radio program questions and problems.[8]

One of the first educational programs using interactive radio was a mathematics program in Nicaragua:

"Interactivity (first) was characterized as a "conversation" between the radio teacher and students. The radio teacher posed questions to which students responded in chorus at a rapid pace. Since then, interactive radio has been used to teach children and adults basic language and science, to instruct them in good health practices, to promote environmental protection, and to train teachers."[9]

The five approaches to interactive radio given above in part grew out of limitations with interactive radio as only a conversation between a studio "teacher" and students at distant schools. [10]

Radio proved better adapted at teaching math, where the number of correct answers is limited, than language, where there is a range of answers. Despite successes in Kenya, it was found that "fast-paced conversation does not work as well in teaching language (as in math)."[11]

Distance education by radio assumes that radio receivers are readily available. The Liberian Primary Education Program, which partly depended on radio for training poorly qualified teachers in programmed teaching and programmed learning classrooms, had to write funds for school radios into its budget when it was found that all teachers did not have radios at home.[12]

The Assistant Minister for Planning at the Liberian Ministry of Education recounted how one donor-funded school project which depended on cassette tape recorders failed when it was found that recorder batteries had not been written into the project budget.[13] The recorders fell into disuse and many gradually were stolen.[14]

In Third World countries like Liberia, a major weakness of interactive radio was its dependence on radio stations as the channel for delivering distance education and the national government's willingness/ability to finance and operate them when donor funding was withdrawn. When the author left Liberia in 1988, there was much doubt if the national government, facing severe economic difficulties, could or would assume responsibility for the three-station Liberian Rural Communications Network, built with USAID funds.[15]

A civil war, which began in 1989 and divided the country, has made this question moot. Only annual income of the central government, which controls only the capital, Monrovia, is $12 million from licenses for oceangoing merchantships and liners.[16]

Interactive radio is especially helpful for two reasons:

1. It actively engages students in learning materials.

2. It presents structured lessons that allow radio teachers to control sequence and pace of learning activities.[17]

The U. S. Agency for International Development has funded educational radio projects in Papua New Guinea and Lesotho, science; Nicaragua, Thailand and Bolivia, mathematics; Kenya, English, and an equivalency program for dropouts in the Dominican Republic. [18]

Some see distance education by radio as a realistic, pragmatic way to bypass longtime educational problems in Third Word countries. "Some Third World countries are realizing the possibility of ever being able to provide enough schools and teachers is remote. . . (A strategy) that has steadily gained the most ground in the past two decades involves recruiting untrained or unqualified teachers, pressing them into service, and then bringing them up to pedagogical or academic certification through distance education."[19]

Arger, in a study of distance education programs in Papua New Guinea, Malaysia and Thailand, is less optimistic about distance education requiring expensive hardware:

"Financing of distance education is often linked to foreign aid." He cites Foks: "I have (attended conferences) where delegates from well-to-do organizations . . . deliver to their less well off colleagues gratuitous advice on how to solve their education problems, especially those of access to students, by the use of expensive and sophisticated technologies which rely on expensive and sophisticated technology infrastructures."[20]

Arger questions whether "national development (in Third World countries) is being significantly influenced by by distance education."[21]

He writes that distance education assumes that students can read fairly well, that they are motivated to do so, and that they have the ability to organize independent study projects. "Yet, it is known that many students (in Third World countries) lack a proper development of these characteristics."

Arger concludes that "distance education's promise of being able to provide a quality, cost-effective education for the masses of the Third World is not a reality."[22]

Partly in response to such problems, so-called soft technologies using interactive techniques have been developed. They do not depend on radio. They include peer tutoring, programmed teaching modules, instructional games, simulation and role-playing materials.[23]

Additional research, perhaps a study of studies, on interactive radio's part in distance education in Third World countries probably is needed.

Endnotes

1 Rebecca L. Oxford et al., "Final Report, Evaluation of the Kenya Radio Language Arts Project," June 1986, 8-1.

2 Philip A. S. Sedlak, "Teachers Interact with Radio in Nepal," Development Communication Report 1988 Special Issue: 6.

3 Jeanne Moulton, "Rethinking Interactivity: Lessons from Interactive Radio Instruction," Development Communication Report 81 (February, 1993) 9.

4 Esta de Fossard, "Script Writing for Interactive Radio," Development Communication Report 81 (Febrary 1993) 14.

5 de Fossard, 15.

6 de Fossard 15.

7 de Fossard 15.

8 de Fossard 15.

9 Moulton 9.

10 Moulton 9.

11 Moulton 9.

12 See Douglas Norman, "Using Radio to Deliver Teacher Training in West Africa," paper presented at 1991 Third World Studies Conference, Omaha.

13 Interview with Honorable E. Delano Cooper, Assistant Minister of Planning and Developmentl, Republic of Liberia, June, 1988.

14 Cooper interview.

15 Norman, "Using Radio to Deliver Teacher Training in West Africa."

16 Mark Huband, "Targeting Taylor," Africa Report July-Aug. 1993: 32.

17 Moulton 10.

18 Gary Coldevin, "Teacher Training: The Quick Fix That Stuck," Development Communication Report April, 1988) 6.

19 Moulton.

20 Geoff Arger, "Distance Education in the Third World: Critical Analysis on the Promise and Reality," Open Learning (June 1990) 13.

21 Arger.

22 Arger.

23 Aida Pasigna, "Interactivity and Soft Technologies: Peer Group Learning Systema," Development Communications Report 81(February, 1993) 17.

Works Cited

Arger, Geoff. "Distance Education in the Third World: Critical Analysis on the Promise and Reality," Open Learning June 1990: 9-18.

Coldeven, Gary. "Teacher Training: The Quick Fix That Stuck." Development Communication Report. April 1988: 5-7.

de Fossard, Esta. "Script Writing for Interactive Radio." Development Communication Report February 1993: 14-16.

Huband, Mark. "Targeting Taylor. Africa Report Jan.-Feb. 1993: 29-32.

Moulton, Jeanne. "Rethinking Interactivity: Lessons from Interactive Radio Instruction." Development Communication Report. February 1993: 9-11.

Norman, Douglas. "Using Radio to Deliver Teacher Training in West Africa. Unpublished paper presented at 1991 Third World Studies Conference,Omaha.

Oxford, Rebecca L. et al. "Final Report, Evaluation of the Kenya Radio Language Arts Project." Unpublished paper, June 1986.

Pasigna, Aida. "Interactivity and Soft Technologies." Development Communication Report. February 1993. 17-19.

Sedlak, Philip A. S. "Teachers Interact with Radio in Nepal," Development Communication Report 1988 Special Report. 5-7.